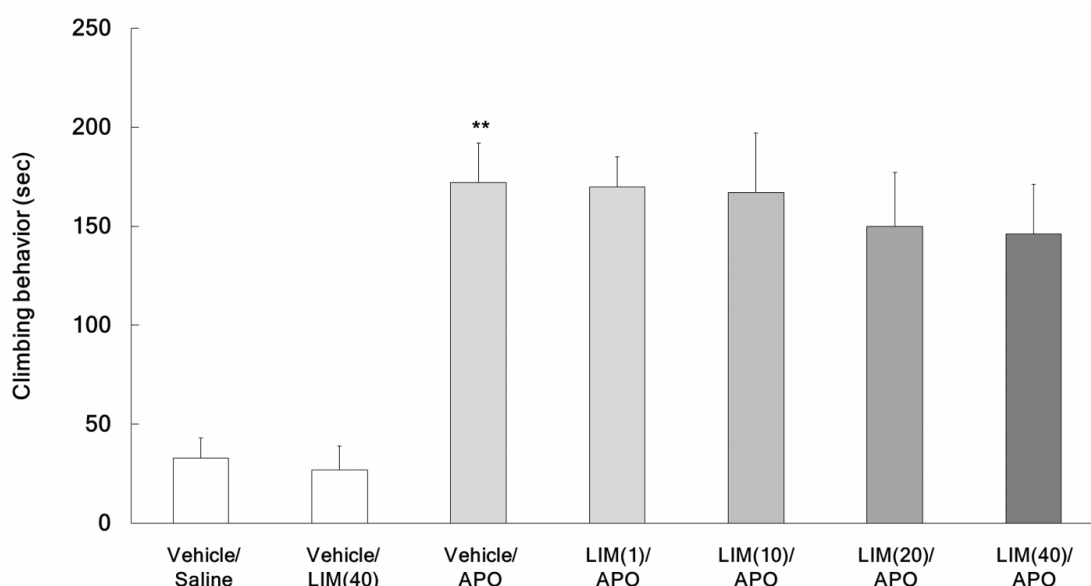


## Supplementary data 1.

### Climbing behavior

Climbing behavior was measured using the modified methods described in previous study (Yun et al., 2001). Immediately after and administration of vehicle or APO (2 mg/kg, i.p.), the mice were put into cylindrical cages (diameter: 12 cm; height: 14 cm) with the floor and wall consisting of metal bars (diameter: 0.2 cm; separated by 1 cm gaps) and covered with a lid. The mice were pretreated with limonene (i.p.) 40 min before the injection of APO. After a 10 min period of exploratory activity, an observer who was blind to the drug treatment estimated the time spent in climbing behavior for 1 min at 10, 20 and 30 min after APO administration. Hence, the maximum score for climbing behavior was 180 s.



**Effect of limonene on APO-induced climbing behaviors.** Climbing behavior has been used as a convenient means of screening dopamine agonists or antagonists and to assess striatal dopamine activity. We confirmed that climbing behavior was no choice between administration of vehicle and limonene. Moreover, limonene had also no effect on APO-induced climbing behavior (2.0 mg/kg).

Yun, J. S., Kim, H. S., Lee, M. K., Oh, K. W., Jang, C. G., Park, W. K., Seong, Y. H., Lee, S. C., Oh, S. K. (2001) Inhibitory effects of MK-801 on contextual sensitization to climbing behavior and on development of tolerance to hypothermia induced by a single high dose of apomorphine. *Pharmacol Res* **44**:473-479.